CLAIMS

1. A method of producing a powder coating, wherein a powder coating raw materials solution comprising as essential constituents a room temperature solid main constituent resin (A) with a curable reactive group, a room temperature solid curing agent (B) which reacts with said curable reactive group of said main constituent resin (A), and an organic solvent (C) incorporating a high boiling point organic solvent (C1) with a boiling point at atmospheric pressure of 150 to 300°C, is spray dried at a temperature at which said main constituent resin (A) and said curing agent (B) undergo no substantial curing reaction, and moreover under conditions where either one of a portion of, and all of, said high boiling point organic solvent (C1) remains, yielding a powder coating in which a percentage content of said high boiling point organic solvent (C1) is from 0.005 to 1% by weight.

2. A method of producing a powder coating according to claim 1, wherein said powder coating raw materials solution utilizes a raw materials solution comprising as essential constituents, a room temperature solid main constituent resin (A) with a curable reactive group, a room temperature solid curing agent (B) which reacts with said curable reactive group of said main constituent resin (A), an organic solvent (C) incorporating a high boiling point organic solvent (C1) with a boiling point at atmospheric pressure of 150 to 300°C, and a pigment (D).

3. A method of producing a powder coating according to claim 2, wherein spray drying is performed following color adjustment of said powder coating raw materials solution.

4. A method of producing a powder coating according to claim 1, wherein organic solvent with a boiling point at atmospheric pressure of no more than 100°C accounts for at least 65% by weight of said organic solvent (C).

5. A method of producing a powder coating according to claim 1, wherein said curable reactive group of said main constituent resin (A) is at least one group selected from a group consisting of epoxy groups, carboxyl groups and hydroxyl groups.

6. A method of producing a powder coating according to claim 1, wherein at least one curable reactive group of said main constituent resin (A) is an epoxy group, and said curing agent (B) is an aliphatic dibasic acid.

7. A method of producing a powder coating according to claim 6, wherein said aliphatic dibasic acid is dodecanedioic acid.

8. A method of producing a powder coating according to claim 6, wherein said organic solvent (C) incorporates an alcohol of 4 carbon atoms or fewer, and an amount of said alcohol of 4

carbon atoms or fewer, relative to an amount of said aliphatic dibasic acid incorporated within said powder coating raw materials solution, is a weight ratio of at least four fold.

9. A method of producing a powder coating according to claim 1, wherein said powder coating raw materials solution is spray dried at 40 to 130°C.

10. A powder coating comprising a room temperature solid main constituent resin (A) with a curable reactive group, a room temperature solid curing agent (B) which reacts with said curable reactive group of said main constituent resin (A), and a high boiling point organic solvent (C1) with a boiling point at atmospheric pressure of 150 to 300°C, wherein a proportion of said high boiling point organic solvent (C1) is from 0.005 to 1% by weight.

11. A powder coating according to claim 10 comprising a room temperature solid main constituent resin (A) with a curable reactive group, a room temperature solid curing agent (B) which reacts with said curable reactive group of said main constituent resin (A), a high boiling point organic solvent (C1) with a boiling point at atmospheric pressure of 150 to 300°C, and a pigment (D).

12. A powder coating according to claim 10, wherein said curable reactive group of said main constituent resin (A) is

at least one group selected from a group consisting of epoxy groups, carboxyl groups and hydroxyl groups.

13. A powder coating according to claim 10, wherein at least one curable reactive group of said main constituent resin (A) is an epoxy group, and said curing agent (B) is an aliphatic dibasic acid.

14. A method of forming either one of a single layer and a multiple layer paint film on a target object for painting, wherein a powder coating (X1) produced by a production method according to claim 1 is used as a top coat paint.

15. A method of forming a paint film according to claim 14, wherein a base coat paint [I] is applied to said target object for painting, and a top coat paint [II] is applied thereon, and said powder coating (X1) is used as said top coat paint [II].

16. A method of forming a paint film according to claim 15, wherein said base coat paint [I] is a colored base coat paint, and said top coat paint [II] is a transparent top coat paint.

17. A method of forming either one of a single layer and a multiple layer paint film on a target object for painting, wherein a powder coating (X2) according to claim 10 is used as a top coat paint.

18. A method of forming a paint film according to claim 17, wherein a base coat paint [I] is applied to said target object for painting, and a top coat paint [II] is applied thereon, and said powder coating (X2) is used as said top coat paint [II].

19. A method of forming a paint film according to claim 18, wherein said base coat paint [I] is a colored base coat paint, and said top coat paint [II] is a transparent top coat paint.